

**REMARKS**

These remarks are made responsive to the non-final office action mailed July 26, 2007. Claims 1-22 are pending.

**35 U.S.C. § 102(e)**

Claims 1, 2, 6-8, 11-13 and 15-22 were rejected under 35 U.S.C. 102(e) as being anticipated by Jansen (US Patent Publication No. 2004/0208638) hereafter "Jansen." Applicant respectfully asserts that claims 1, 2, 6-8, 11-13 and 15-22 are patentable over Jansen.

Jansen is describing a communication system using entangled photons in transmission to enable high bandwidth communication which is substantially free of dispersion and non-linear effects. (See Jansen [0006] and [0007]). Jansen describes a digital transmission method meaning a way to transmit a signal incorporating bits. It incorporates or modulates bit values into transmissions of entangled photons by adjusting the optical path lengths of two paths for the photons. (See for example, Jansen [0008] [0011], [0044], [0066], [0067]). In this way, a sequence of bit values is created for carrying information in a communication system. Jansen is showing how to create a digital transmission signal that can be used to carry any kind of information. There is no discussion about the meaning of the information. There is no discussion of a decision on what actions are to be taken based on the information received.

Claim 1 is directed to "a method for coordinating predefined actions for at least two nodes." In particular, Jansen fails to teach or suggest at least the following element of claim 1:

"sending a respective one of the quantum-entangled particles to each of the at least two nodes."

In Jansen, the signal is modulated to incorporate different bit values which are sent to the same receiver. Figure 2 of Jansen is a single receiver which as shown in Figure 3 is associated with a single computer system 305.

There is no "defining at least two selectable actions at each of the nodes, a first one of the at least two selectable actions being identified by a first quantum state and a second one of the at least two quantum-entangled particles being identified by a second quantum state that is different than the first quantum state." Again, Jansen is

not concerned with performing actions at different nodes based on different values of quantum states. It is just concerned with how to make a bit stream with entangled photons to greatly reduce or eliminate dispersion problems in optical fibers.

Furthermore, "for at least one of the first and second nodes, selecting and performing one of the at least two predefined actions, in part, as a function the detected state of the quantum-entangled particles and the quantum-state identification of the predefined actions" is not disclosed, taught or suggested either. As stated actions at a node based on meaning attributed to received data values is not discussed in Jansen which is concerned with achieving a substantially dispersion free digital transmission signal.

Therefore, claim 1 and its dependent claims 2, 6-8, 11-13 are patentable over Jansen.

The arguments above with respect to claim 1 are applicable for illustrating why claims 15-22 are patentable over Jansen.

#### **Allowable Subject Matter**

Claims 3-5, 9-10 and 14 were identified as containing allowable subject matter.

#### Conclusion

In light of the arguments presented above, the pending claims as amended are in condition for allowance, and applicants respectfully request a prompt notice of allowance.

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Respectfully Submitted on Behalf of Applicants

Bernardo Huberman et al.



Eileen Lehmann  
Registration No. 39,272  
Hewlett-Packard Company  
Mail Stop 1197  
1501 Page Mill Road  
Palo Alto, CA 94304  
650-857-7940 (telephone)  
650-852-8063 (fax)